Trade secrets versus Patent law

The Economic History Association has awarded Petra Moser, an assistant professor at the Massachusetts Institute of Technology's Sloan School of Management, a dissertation prize for her research on the Crystal Palace exhibition of 1851 in London, at which thousand of inventions from around the world were on display, with what this implies about innovation today.

One of her conclusions is that developing countries like India, scheduled to come into full compliance with an international patent treaty in 2005, may be better off without strong patent laws.

Conventional wisdom among economists is that a robust patent system helped transform the US into an economic powerhouse and may be true. But, Professor Moser concludes, what was good for America and Britain is not necessarily good for emerging, largely rural economies in countries like Denmark, the Netherlands and Switzerland.

"Many of the best innovators in what was the high technology of the day came from some of the smallest countries in Europe, and these nations did not have patent laws."

In two examples she shows patents serve little purpose. Swiss inventors concentrated their efforts in watch making and specialized steel for scientific and optical instruments. Their innovations were exceedingly difficult to reverse-engineer and thus were successfully guarded as trade secrets without need for patents.

Patent laws require that an inventor, in a quid pro quo exchange for the limited monopoly that a patent provides, disclose his methods to others. Inventors from countries not governed by patent laws were free to appropriate ideas patented by innovators in other countries.

The French inventor of margarine in 1870 Hippolyte Mège-Mouriez, showed his patented invention to two Dutch entrepreneurs. They took the ideas, improved on them (keeping the improvements secret) and set up a thriving margarine business, that in the 20th century merged into the multinational conglomerate Unilever, while the Frenchman died a pauper.

TI reports 3Q 2003 financials

TI's total revenue of $2533m increased 8% sequentially, and 13% from a year ago due to semiconductors growth of 10% sequentially. Compared with the year-ago quarter, semiconductor revenue increased 16%. TI's gross profit is up 18% sequentially, 23% from a year ago. Semiconductor orders are up 21% sequentially, and 29% from a year ago. Earnings were 25c/share in the quarter, including a contribution from the sale of Micron Technology Inc common stock and the impact of charges for restructuring and acquisition of Radia Communications Inc.

Sequentially TI revenue from semiconductor wireless market grew 22% and 30% from the year-ago quarter thanks to 2.5G wireless modems and OMAP applications processors. Broadband revenue was up 11% sequentially due to strong demand for the latest multimode wireless local area networking (LAN) products that support the IEEE 802.11 a, b and g standards. Broadband revenue was up 74% from the year-ago quarter.

US, UK and Russia takes Nobels in economics, medicine and physics

American professor Robert Engle and Welsh physicist professor, Clive Granger who spent the '70s and '80s working at the University of California, San Diego, have won this year's Nobel Memorial Prize in Economic Science for econometric statistical methods. The prize (about $1.3m) was not established by Alfred Nobel's will, but created more recently in 1968 by Sweden's central bank.

The 2003 Nobel prize for medicine has been awarded to Dr Paul Lauterbur of University of Illinois US and Sir Peter Mansfield of University of Nottingham, UK for their development of nuclear magnetic resonance (NMR) imaging or spectroscopy, visualising body tissue without using radiation, unlike CAT scanners. MRI uses magnetic fields and radio waves pulses to examine tissue. Dr Lauterbur an early NMR spectroscopy user in 1946 was aided by Sir Peter's work on how to speed the imaging process by developing new mathematical techniques to analyse the information from the rapidly varying the magnetic field. Last year, 22,000 MRI cameras were in use worldwide, and more than 60m scans perform- ed, according to the Karolinksa Institute in Stockholm, which chooses the medical Nobel winners.

A Russian and two Americans, from Russia and England (Dr Alexei Abrikosov, Argonne National Laboratory, Illinois; Dr Vitaly Ginzburg, P. N. Lebedev Physical Institute, Moscow; and D .Anthony Leggett, University of Illinois, Urbana-Champaign) have won the Nobel prize in Physics, for clarification on how electricity can flow through some materials without resistance, and how some fluids can flow without friction.

Celeritek reports

For Q2 of fiscal 2004, Celeritek reported revenues of $7.1m, compared with $6.6m in the Q1 of '04 and $15.5m in Q2 of '03. Net loss for the Q2 of '04 was $5.7m (46c/share), compared with a net loss of $1.2m (10c/share) for the same period a year ago.

Included in other income was $800,000 related to the collection of a cancellation charge from a customer. Included in the net loss was a non-cash special charge of $600,000 for asset impairment expense on restructuring of Celeritek's UK facility and $2m related to its decision to exit the wireless handset power amplifier market sold for $1m.

Now focusing on GaAs-based subsystems for the defence market and standard GaAs semiconductors for the defence and communications markets, Celeritek expects its cash usage to be roughly $1m per quarter compared to $5m in Q1 of fiscal '04 and $4m in Q2 of '04.

Celeritek expects to significantly reduce its breakeven revenue level from approximately $18m currently, to some $10m per quarter going forward, and anticipates realising annual cost savings in the range of $9-10m.

The company also expects to incur approximately $2.4m in special charges next quarter related to termination expense, building lease impairment and facilities consolidation cost.

Backlog at end September '03 was $12.9m: $10.4m in defence products and $2.5m in semiconductor products. Book-to-bill ratio in the quarter was 0.8 for semiconductor products and 1.0 for defence products.